SEQUENCE LISTING

<110> Temasek Life Sciences Laboratory

<120> NUCLEIC ACIDS FROM RICE CONFERRING RESISTANCE TO BACTERIAL BLIGHT DISEASE CAUSED BY XATHOMONAS SPP

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<170> PatentIn version 3.1

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<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 18
aagcagtggt atcaacgcag agtacgcggg 30

<210> 19

<211> 57

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (57)..(57)

<223> n = a, t, c, or g

<400> 19
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<210> 20

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 20
caaccagcaa cgccaccgag cc 22

<210> 21

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 21
aagcagtggt atcaacgcag agt 23

<210> 22

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 22
accttgcgtc gccctcctcc tg 22

<210> 23

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (49)..(49)

<223> n= a, t, c, or g

<220>

<221> misc_feature

<222> (27)..(27)

<223> n= a, t, c, or g

<400> 23
tvvvvvvvvv vvvvvvvvvv vvvvvvn 27

<210> 24

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 24
ctcctcagca atggcggcag cga 23

<210> 25

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 25
ctaatacgac tcactatagg gcaagcagtg gtatcaacgc agagt 45

<210> 26

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 26
ctaatacgac tcactatagg gc 22

<210> 27

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 27
acacacagat ccgtactcaa ctcc 24

<210> 28

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 28
gaccacgcgt atcgatgtcg acttttttct tttttttt 38

<210> 29

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 29
gagagcatca gagcaaagta ctcc 24

<210> 30

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 30
gaccacgcgt atcgatgtcg ac 22

<210> 31

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (1)..(1)

<223> n = a, g, c, or t

<400> 31
ntcgaswtsg wgtt 14

<210> 32

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (1)..(1)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (11)..(11)

<223> n = a, g, c, or t

<400> 32
ngtcgaswga nawgaa 16

<210> 33

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (5)..(5)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (10)..(10)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (13)..(13)

<223> n = a, g, c, or t

<400> 33
wgtgnagwan canaga 16

<210> 34

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (1)..(1)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (11)..(11)

<223> n = a, g, c, or t

<400> 34
ngtasaswgt nawcaa 16

<210> 35

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (5)..(5)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (10)..(10)

<223> n = a, g, c, or t

<400> 35
agwgnagwan cawagg 16

<210> 36

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (5)..(5)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (10)..(10)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (13)..(13)

<223> n = a, g, c, or t

<400> 36
sttgntastn ctntgc 16

<210> 37

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 37
acgttgtaaa acgacggcca gt 22

<210> 38

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 38
gtaatacgac tcactatagg gcga 24

<210> 39

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 39
gagtcgacct gcaggcatgc a 21

<210> 40

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 40
cttccggctc gtatgttgtg tgg 23

<210> 41

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 41
gagcggataa caatttcaca cagga 25

<210> 42

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 42
ttaggtgaga ctatagaata ctca 24

<210> 43

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 43
taacaacatg agaattacta atccg 25

<210> 44

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 44
catgtatcca agttcgtagc tag 23

<210> 45

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 45
ttggtttttt tgaatgaagg gtatat 26

<210> 46

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 46
aattcatgcc cacaagtaca gtac 24

<210> 47

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 47
ctgaaacaca ggaaaaatcc cgtt 24

<210> 48

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 48
tgcataggcc ctgtttagtt ctaa 24

<210> 49

<211> 1552

<212> DNA

<213> Oryza sativa

<220>

<221> Xa31 promoter of IRBB31 allele (resistant allele)

<222> (1)..(1552)

<223>

<220>

<221> Xa31 promoter of IRBB31 allele (resistant allele)

<222> (1)..(1552)

<223>

<400> 49

gctgaaccaa acagttttag ctccatcgaa gaaaggagtt atactgattg gaatgctctc 60

acagtaaaaa aaacaaggaa gtagagctgg atttcagaca gttctacaag aagttagaac 120

tctaccaaaa ttggaatttt ggatgatggt cttttaaaaa ctcgattgca ggaataaaat 180

tttacggctt gaaacttaca aaatgattag aaaagataac atgcctcagc gatttgtaaa 240

aaagtgaaca aataaaaatc tacaatacca ctaaactatt gctttatttt ggggacattg 300

cttaccattg aaaaaacaac taaccgtaaa tacgaacacc catatcaaat atactatcac 360

tgataaaata atcaattgta aattcaagca cacatattag tatagtactt taactcgatt 420

ggatagaaga aacctaacta atttaagcta tgcctcacaa caaaaaggta taaatttttt 480

aaggcttctt ttttttctt gcgtttgcta gtttatgctt ttaagatgtt tatacctttt 540

actccctca ttcactgttt aaatacaatg ggaattagtg aaatcaatga gagttcaaac 600

ttcgaaacac tgaatacatg ttatttctgga ttgaaatcaa atcgaatcag tcaaattcaa 660

ataggaggag gaacataggc attcttcctt tcttcagcgg gcaccattga attcagatac 720

tgcttcgcct agtctctgtc caagactcca cattttctga tggtgatggg gaactctgaa 780

actataggag gaagaataaa atgaagaatg cagaaatgaa tagtaatttg tgtttttaa 840

ttcttcttca attccacctt aggatccaac ttcagtccaa atccaaagta atgcaactgc 900

cactagatca ggctagagct tcaaattcaa ctccaaaaac ctccgtaaag tggcacacac 960

agaggaaaaa tcctggattc gtcactgccc atcaacatct gctttcgcct cccaattcct 1020

gctttctgaa atctgctttc gccgaattca tgccttcttg aattatgctt tcttagaccc 1080

tctttagatg ggactaaaac ttttactctc tatcacatcg gatgtttgga cactaattat 1140

aaatattaaa cgtagactat taataaaacc catctataat cttgtattaa ttcgcgagac 1200

gaatctattg agcctaatta atccatgatt agcctatgtg atgctataat aaacattctc 1260

taattataaa ttaattgggc ttaaaaaatt tgtctcgcgt attagctttc atttatataa 1320

ttagttttat aaatagtcta tatttaatac tctaaattag tgtctaaata cagggactaa 1380

agttaagtca ctggatccaa acaccaccta aggttttctt gtgtacttgt gaattgtggt 1440
tgactacgac tactagtgct ataaatagaa gaagagacca atagagagca tcagagcaaa 1500
gtactcctaa aagacagcca cacacactga gacacccaag aagctgcctc ca 1552

<210> 50
<211> 541
<212> DNA
<213> Oryza sativa

<220>
<221> Xa31 3' regulation region of IRB31 allele (resistant allele)
<222> (1)..(541)
<223>

<400> 50
ttctcctccg tgtccggtgg tcatcttctt ctccgtgctt ttgctctgga gttgagtacg 60
gatctgtgtg tactgcattc ttgcttaatt agtgccctac acgttatgct ttcgaaacat 120
catcttttct cagtatagtt caataaattt cagctcaaat ttgtcctcca agacgagttc 180
tccatccaaa cgaaacttat ggtgttccgt tgtttgggcc gattttatat gttggaaatg 240
tacagacttc atagtactgt gtttcttttt tggaataagt tcaccagagg ttccttaact 300
taacggcgat attttttag gtcctttaac cacaaaacca gaaatgtgca cccctaaact 360
ttcacaatcc gtgcacaaga ggtcctatgg cagtatacgt gggtggtttc gctgacgtga 420
catcctagtc agcaaaaata aataaataag taagtggggc ccatatgtaa gtgagagaaa 480
acgatgcggg ccccacatcc cttcttttc ccccttttctt ctcctctcgt cttcttcgac 540
g 541

<210> 51
<211> 1583
<212> DNA
<213> Oryza sativa

<220>

<221> xa31 promoter of IR24 allele (susceptible allele)

<222> (1)..(1583)

<223>

<400> 51

gctgaaccaa acagttttag ctccatcgaa gaaaggagtt atactgattg gaatgctcac 60

agttaaaaaa aacaaggaag tagagctgga ttttagacag ttctataaga agttagaact 120

ctaccaaacg gatagttaat tggaattttg gatgatggtc ttttaaaaac tcgattgcag 180

gaataaaatt ttacggcttg aaacttacaa aatgattaga aaagataaca tgcctcagcg 240

atttgtaaaa aagtgaacaa ataaaaatct acaataccac taaactattg ctttattttg 300

gggacattgc ttaccattga aaaaacaact aaccgtaaat acgaacaccc atgtcaaata 360

tactatcact gataaaataa tcaattgtaa attcaagcac acatattagt atagtacttt 420

aactcgattg gatagaagaa acctaactaa tttaagctat gcctcacaac aaaaaggtat 480

aaatttttta aggcttcttt ttttttcttg cgtttgctag tttatgcttt taagatgttt 540

atacttttta ctcccctcat tcactgttta aatacaatgg gaattagtga aatcaatgag 600

agttcaaact tcgaaacact gaatacatgt tattttggat tgaaatcaaa tcgaatcagt 660

caaattcaaa taggaggagg aacataggca ttcttccttt cttcagcggg caccattgaa 720

ttcagatact gcttcgccta gtctctgtcc aagactccac attttctgat ggtgatgggg 780

aactctgaaa ctataggagg aagaataaaa tgaagaatgc agaaatgaat agtaatttgt 840

gtttttttaat tctttcttcaa ttccacctta ggatccaact tcagtccaaa tccaaagtaa 900

tgcaactgcc actagatcag gctagagctt caaattcaac tccaaaaacc tccgtaaagt 960

ggcacacaca gaggaaaaat cctggattcg tcactgccca tcaacatctg ctttcgcctc 1020

ccaattcctg ctttctgaaa tctgctttcg ccgaattcat gccttcttga attatgcttt 1080

cttagaccct ctttagatga gactaaaact tttactctct atcacatcgg atgtttggac 1140

actaattata aatattaaac gtagactatt aataaaaccc atctataatc ttgtattaat 1200

tcgcgtgacg aatctattga gcctaattaa tccatgatta gcctatgtga tgctataata 1260

aacattctct aattataaat taattgggct taaaaaattt gtctcgcgta ttagctttca 1320

tttatgtaat tagttttata aatagtctat atttaatact ctaaattagt gtctaaatac 1380

agggactaaa gttaagtccc tggatccaaa cgccacctaa ggttttcttg tgtacttgtg 1440
aattgtggtt tcttgtgtac ttgtgaattg tggttgacta cgactacgag tgctataaat 1500
agaagagacc aatagagagc atcagagcaa agtactccta aaagacagcc acacacactg 1560
agacacccaa gaagctgcct cca 1583

<210> 52
<211> 541
<212> DNA
<213> Oryza sativa

<220>
<221> xa31 3' regulation region of IR24 allele (susceptible allele)
<222> (1)..(541)
<223>

<400> 52
ttctcctccg tgtccggtgg tcatcttctt ctccgtgctt ttgctctgga gttgagtacg 60
gatctgtgtg tactgcattc ttgcttaatt agtgccctac acgttatgct ttcgaaacat 120
catctttttt cagtatagtt caataaattt cagctcaaat ttgtcctcca agacgagttc 180
tccatccaaa cgaaacttat ggtgttccgt tgtttgggcc gattttatat gttggaaatg 240
tacagacttc atagtactgt gtttcttttt tggaataagt tcaccagagg ttccttaact 300
taacggcgat attttttag gtcctttaac cacaaaacca gaaatgtgca cccctaaact 360
ttcacaatcc gtgcacaaga ggtcctatgg cagtatacgt gggtggtttc gctgacgtga 420
catcctagtc agcaaaaata aataaataag taagtggggc ccatatgtaa gtgagagaaa 480
acgatgcggg ccccacatcc cttcttttta ccccttttctt ctcctctcgt cttcttcgac 540
g 541